

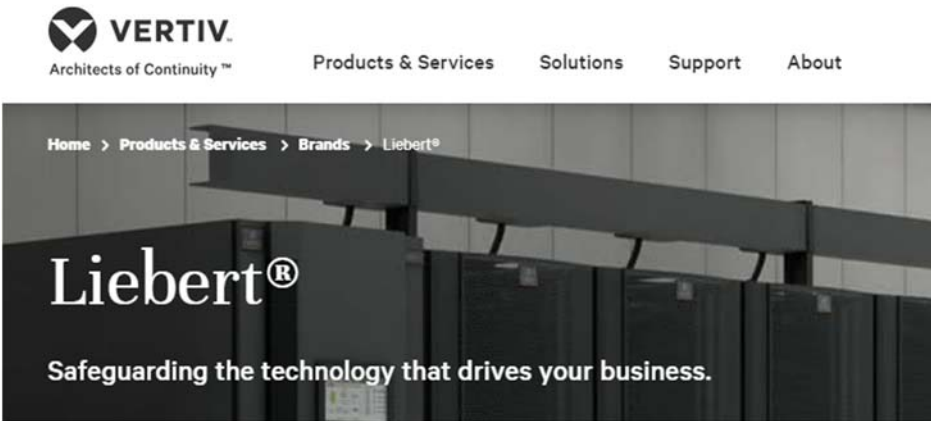





Exhibit 11

U.S. Patent No. 7,031,870 – Infringement Claim Chart

Claim 1	Exemplary Evidence of Infringement by CyrusOne
<p>[1pre] A method for evaluating one or more components in a data center, the method comprising:</p>	<p>CyrusOne’s data centers use a method for evaluating one or more components in a data center.</p> <p>For example, CyrusOne uses Vertiv and Liebert cooling in its U.S. data centers to control atmospheric conditions. Liebert’s CRAC units are controlled, for example, by Liebert’s iCOM and/or iCOM-S Intelligent Communication and Monitoring System, which uses a method for evaluating one or more components in a data center.</p> <div data-bbox="787 649 919 703"> <h2>CIN99</h2> </div> <div data-bbox="787 714 982 812"> <p>CyrusOne Data Center Cincinnati - Blue Ash 4600 McAuley Place, 4th Floor Cincinnati, OH 45242</p> </div> <div data-bbox="787 828 1022 974"> <p>Located on McAuley Place, this Cincinnati data center facility is for customers that require a robust data center for mission-critical applications, as well as for disaster recovery and business continuity environments.</p> </div> <div data-bbox="1094 656 1892 1015">  </div> <div data-bbox="1094 1049 1417 1230">  </div> <div data-bbox="1457 1044 1690 1096"> <h2>Overview</h2> </div> <div data-bbox="1457 1099 1833 1208"> <ul style="list-style-type: none"> • 15,000 sq. ft. data center/8,000 colo square feet (CSF) • Up to 900 kW available • 12-inch raised floor design • 20, and 22 ton Liebert Downflow Chilled Water CRAC units. </div> <p>https://documents.cyrusone.com/wp-content/uploads/2023/06/2022-CIN97_Cincinnati.pdf, p. 1.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p data-bbox="795 282 890 315">Cooling</p> <ul data-bbox="795 331 1178 526" style="list-style-type: none"><li data-bbox="795 331 953 363">• N+1 Cooling<li data-bbox="795 388 1167 420">• Redundant DX and Glycol Chillers<li data-bbox="795 444 1178 477">• Redundant raised floor CRAC units<li data-bbox="795 501 999 526">• 12in Raised floor <p data-bbox="766 574 1635 639">https://documents.cyrusone.com/wp-content/uploads/2023/06/2022-CIN97_Cincinnati.pdf, p. 2.</p> <div data-bbox="766 721 1692 1138"></div> <p data-bbox="766 1162 1467 1195">https://www.vertiv.com/en-us/products/brands/liebert/.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<div data-bbox="768 256 1852 576">The image shows a dark gray rectangular area containing the VERTIV logo (a stylized 'V' inside a circle) and the word 'VERTIV' in white capital letters. To the right of this, the Liebert logo is shown in white, followed by the text 'iCOM™ Thermal System Controls' and 'Greater Data Center Protection, Efficiency & Insight' in a smaller white font.</div> <p data-bbox="768 597 1814 673">https://www.vertiv.com/49d637/globalassets/shared/liebert-icom-thermal-system-controls-brochure.pdf (“iCOM Brochure”).</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p>At the cooling unit level, the Liebert iCOM unit control provides the highest protection available and optimal performance.</p> <ul style="list-style-type: none"> • Monitors 380 unit and component points to eliminate single points of failure • Self-healing features avoid passing unsafe operating thresholds • Highly intuitive, full-color, touch screen simplifies operations to save time and reduce human error • Multiple, automated unit protection routines, including lead/lag, cascade, rapid restart, refrigerant protection and valve calibration  <hr/> <p>At the supervisory level, the Liebert iCOM-S system control offers a revolutionary way to harmonize and optimize thermal system performance to optimize capacity across the data center, gain quick access to actionable data, and automate system diagnostics and trending.</p> <ul style="list-style-type: none"> • Advanced monitoring and at-a-glance reporting on performance metrics and trends for efficiency, capacity and adverse events • Up to 50% system efficiency gains • 30% lower deployment costs • Teamwork modes that prevent conflict between units and allow them to adapt to changes in facility and IT demand to improve efficiency and availability and reduce system wear and tear – saving more than \$10,000 per unit per year in energy costs • Simple and easy to deploy — auto-configuration to detect and configure up to 4,800 sensors, eliminating the need for custom integration to building management systems and cutting sensor deployment times in half  <p>Liebert iCOM unit control and Liebert iCOM-S system control are available for new Vertiv™ data center cooling units or as retrofits.</p> <p>iCOM Brochure at p. 3.</p>
[1a] detecting inlet and outlet temperatures of one or more heat dissipating devices;	<p>CyrusOne detects inlet and outlet temperatures of one or more heat dissipating devices.</p> <p>CyrusOne uses Liebert iCOM. Liebert iCOM detects inlet and outlet temperatures at server racks using wired, remote rack sensors.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p>9.4 Wired Remote Sensors</p> <p>Wired, remote, rack sensors can function as control sensors and subsequently, provide input individually at the unit level or at the system level for temperature control and teamwork functions.</p> <p>Each wired remote rack sensor has two thermistors/probes. In Individual Sensor mode, the higher temperature reading or the average temperature reading of the two probes can be used. In Unit Sensors mode, some or all of the rack sensor's temperature readings are considered for higher (maximum) or average calculation. For example, setting three sensors as control and average for unit mode, averages the three highest temperature readings.</p> <p>https://www.vertiv.com/49b8b2/globalassets/shared/liebert-icom-user-manual_sl-31075.pdf ("iCOM Manual") at p. 156.</p>
[1b] detecting temperatures of air supplied by one or more computer room air conditioning (CRAC) units;	<p>CyrusOne detects temperatures of air supplied by one or more computer room air conditioning (CRAC) units.</p> <p>CyrusOne uses Liebert iCOM. Liebert iCOM detects temperatures of air supplied by one or more CRAC units.</p> <p>13.4 Installing Supply Control Sensors</p> <p>13.4.1 Installing the Supply Air Temperature Sensor</p> <p>The supply temperature sensor is connected to P8, Pins 1 and 2 at the factory and requires no configuration.</p> <ol style="list-style-type: none"> 1. Place the sensor in an area that is influenced only by the unit to which it is connected to provide an accurate reading: 5 ft. to 15 ft. (1.5 m to 4.5 m) from the cooling unit, Figure 13.16 below. <p>iCOM Manual at p. 191.</p>
[1c] calculating indices of air re-circulation for the one or more heat dissipating devices based upon the detected inlet temperatures, outlet temperatures and supplied air temperatures;	<p>CyrusOne calculates indices of air re-circulation for the one or more heat dissipating devices based upon the detected inlet temperatures, outlet temperatures and supplied air temperatures.</p> <p>CyrusOne uses Liebert iCOM. Liebert iCOM calculates indices of air recirculation for server racks based on detected inlet, outlet, and supplied air temperatures.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p>13.2 Installing Wired Remote Sensors</p> <p>Up to 10 remote sensor modules, installed in the monitored racks and connected to the cooling unit, provide control and reference input to iCOM and building-management systems. Using remote, rack sensors combats cooling problems related to recirculation air, uneven rack loading, and air distribution.</p> <p>iCOM Manual at p. 180.</p> <p>13.1 Return Air Temperature/Humidity Sensor</p> <p>The return temperature/humidity sensor is located in the unit return air section and is supplied on all Liebert®systems with iCOM™ controls. The assembly connects to plug connection P67 on the iCOM internal control board on all CRV systems.</p> <p>iCOM Manual at p. 179.</p> <p>13.4 Installing Supply Control Sensors</p> <p>13.4.1 Installing the Supply Air Temperature Sensor</p> <p>The supply temperature sensor is connected to P8, Pins 1 and 2 at the factory and requires no configuration.</p> <ol style="list-style-type: none"> 1. Place the sensor in an area that is influenced only by the unit to which it is connected to provide an accurate reading: 5 ft. to 15 ft. (1.5 m to 4.5 m) from the cooling unit, Figure 13.16 below. <p>iCOM Manual at p. 191.</p> <p>Temperature Control Sensor</p> <p>Selects sensor that controls cooling. Values are:</p> <ul style="list-style-type: none"> • Supply Sensor: Temperature control is based on maintaining the temperature of the discharge air from the cooling unit. See Supply Sensors on page 158. • Remote Sensor: Temperature control is based on the temperature reading(s) from wired remote/rack sensor(s). See Wired Remote Sensors on page 156. • Return Sensor: Temperature control is based on maintaining the temperature of the room air. • Customer input setpoint (remote alarm device)

Claim 1	Exemplary Evidence of Infringement by CyrusOne																					
	iCOM Manual at p. 25.																					
[1d] varying a flow field setting of air delivered to the one or more heat dissipating devices;	<p>CyrusOne varies a flow field setting of air delivered to the one or more heat dissipating devices.</p> <p>CyrusOne uses Liebert iCOM. Liebert iCOM varies the flow field setting of air delivered to server racks by, for example, controlling fan speed.</p> <p>3.1.12 Automatic Fan Speed Control</p> <p>Temperature sensors can control fan speed using one of three modes based on the type of sensor selected as the fan-control sensor: supply, return, or remote, see Table 32 below . Control is based on the selected sensor for both fan control and temperature control and their setpoints as follows:</p> <ul style="list-style-type: none">• Coupled: The fan control and temperature control sensor selection is the same. When coupled, fan speed is determined by the temperature setpoints.• Decoupled: The fan control and temperature control sensor selection is different. When decoupled, fan speed is determined by the fan setpoints. <p>Table 3.2 Fan Speed Controlling Sensor Options</p> <table><tr><th colspan="2" rowspan="2"></th><th colspan="3">Temperature Control Sensor Selected</th></tr><tr><th>Supply Sensor</th><th>Remote Sensor</th><th>Return Sensor</th></tr><tr><td rowspan="3">Fan Control Sensor Selected</td><td>Supply Sensor</td><td>Coupled</td><td>N/A</td><td>N/A</td></tr><tr><td>Remote Sensor</td><td>Decoupled (Recommended)</td><td>Coupled</td><td>N/A</td></tr><tr><td>Return Sensor</td><td>Decoupled</td><td>Decoupled</td><td>Coupled</td></tr></table>			Temperature Control Sensor Selected			Supply Sensor	Remote Sensor	Return Sensor	Fan Control Sensor Selected	Supply Sensor	Coupled	N/A	N/A	Remote Sensor	Decoupled (Recommended)	Coupled	N/A	Return Sensor	Decoupled	Decoupled	Coupled
				Temperature Control Sensor Selected																		
		Supply Sensor	Remote Sensor	Return Sensor																		
Fan Control Sensor Selected	Supply Sensor	Coupled	N/A	N/A																		
	Remote Sensor	Decoupled (Recommended)	Coupled	N/A																		
	Return Sensor	Decoupled	Decoupled	Coupled																		
	iCOM Manual at p. 45.																					
[1e] determining whether the indices of air re-circulation has changed in response to the varied flow field settings; and	<p>CyrusOne determines whether the indices of air re-circulation has changed in response to the varied flow field settings.</p> <p>CyrusOne uses Liebert iCOM. Liebert iCOM determines whether the indices of air re-circulation have changed in response to varied flow field settings, by for example</p>																					

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p>changing the response to varying fan speeds based on the length of time temperature has deviated and the amount of deviation from the setpoint.</p> <p>Temperature Integration Time</p> <p>Adjusts amount of cooling/heating based on the length of time the temperature has deviated from the setpoint. The time selected is the amount of time it will take cooling capacity to reach 100%. For example, if three minutes is selected, cooling capacity will increase to 100% in three minutes.</p> <p>NOTE: Three to five minutes of integration time is adequate for most applications. See Considerations when Using PI Temperature Control on page 28 .</p> <p>NOTE: Only used when Temperature Control Type is PI.</p> <p>Temperature Proportional Band</p> <p>Adjusts the activation point of cooling/heating components based on deviation from setpoint by placing half of the selected value on each side of the temperature control setpoint. A smaller number causes faster reaction to temperature changes.</p> <p>NOTE: Setting this too low causes short cycling of compressors.</p> <p>iCOM Manual at p. 25.</p>
<p>[1f] evaluating the one or more components based upon changes in the indices of air re-circulation for the one or more heat dissipating devices at the various flow field settings.</p>	<p>CyrusOne evaluates the one or more components based upon changes in the indices of air re-circulation for the one or more heat dissipating devices at the various flow field settings.</p> <p>CyrusOne uses Liebert iCOM. Liebert iCOM evaluates the components based on changed in the indices of air re-circulation for the server racks at various flow field settings. For example, Teamwork Mode evaluates changes in the air temperature of the inlet, outlet, or supply temperature of the heat dissipating devices and adjusts one or more cooling units controls to provide the required cooling capacity, and Standby Mode evaluates these changes and activates/deactivates one or more CRAC units to provide required cooling capacity.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p data-bbox="779 272 1801 318">6 Teamwork, Standby and Rotation for Cooling Units</p> <p data-bbox="779 354 1854 410">U2U communication via private network and additional hardware (see U2U Networking on page 95) allows the following operating features for the cooling units:</p> <ul data-bbox="856 435 1071 537" style="list-style-type: none"><li data-bbox="856 435 993 459">• Teamwork<li data-bbox="856 472 1071 496">• Standby (Rotation)<li data-bbox="856 509 976 534">• Cascade <p data-bbox="766 565 1064 597">iCOM Manual at p. 99.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p>6.2.3 Teamwork Mode 1—Parallel Operation</p> <p>In Teamwork mode 1, fan speed and cooling capacity are ramped up in parallel, which means that all units operate identically.</p> <p>Teamwork mode 1 is best for small rooms with balanced heat loads. A master unit collects the controlling readings for temperature and humidity from all the operating (fan on) units in the group, then determines the average or worst-case reading, and sends operating instructions to efficiently distribute cooling capacity across available units.</p> <p>In Teamwork mode 1, most parameters are shared and, when set in any unit, are set in all units in the group.</p> <p>6.2.4 Teamwork Mode 2—Independent Operation</p> <p>Teamwork mode 2 works well for most applications, and best in large rooms with un-balanced heat loads by preventing units in a group from operating in opposing modes, some cooling and some heating. All temperature and humidity parameters are shared by the group. The master unit monitors all available unit-sensor readings and determines the demand for cooling, heating, humidification and dehumidification, then sends operating instructions to address the greatest demand.</p> <p>In Teamwork mode 2, the setpoints for all units must be identical. The proportional band, deadband, and related settings may differ by unit. Fan speed is modulated per unit. Rotation and cascading is not available, so expect uneven distribution of work hours.</p> <p>6.2.5 Teamwork Mode 3—Optimized Aisle Operation</p> <p>In Teamwork Mode 3, the fan speed for all units operates in parallel, which means fan speed operation is identical at each unit. However, cooling capacity operates independently for each unit.</p> <p>Teamwork mode 3 takes advantage of variable speed fan options and variable capacity component options to maintain rooms with an unbalanced load and to prevent units in a group from operating in opposing modes. All units operate in the same mode based on the average or worst case (maximum) readings from the unit sensors. A local control (cooling capacity supply sensor) provides input to manage and maintain the discharge-air temperature at each unit. In addition, fan speed and operation are controlled based on readings from the unit temperature or static pressure sensors to control air delivery to the cold aisle.</p> <p>iCOM Manual at p. 102.</p>

Claim 1	Exemplary Evidence of Infringement by CyrusOne
	<p data-bbox="800 267 1560 305">6.3 Assigning Cooling Units to Standby (Lead/Lag)</p> <p data-bbox="800 334 1850 389">Standby assigns some units to operate while others are on standby, meaning a unit is idle but ready to become active in the event of an alarm condition in one of the operating units or based on a rotation schedule.</p> <p data-bbox="800 410 1814 466">When a unit is in standby mode, fan(s) are off and no cooling occurs. In multiple cooling unit systems, assigning units to standby lets you:</p> <ul data-bbox="873 487 1850 613" style="list-style-type: none">• Configure redundancy in case of failure scenarios (standby).• Manage cooling unit run time (lead/lag). See Setting a Rotation Schedule on the next page .• Modulate for very low loads to full design load (to be temperature reactive) by cascading activation of standby units (configured when setting up teamwork mode). <p data-bbox="768 659 1079 696">iCOM Manual at p. 103.</p>